

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (currently amended) An intervertebral implant (1), ~~specifically an artificial intervertebral disk~~, comprising a central axis (2), an upper section (10), suitable for laying onto the base plate of a vertebral body lying above, and a lower section (20) suitable for laying onto the cover plate of a vertebral body lying below, wherein:

A) ~~the upper section (10) is provided with has~~ a ventral side area (11), a dorsal side area (12), two lateral side areas (13,14), a top apposition surface (15), and a bottom surface (16);

B) ~~the lower section (20) is provided with has~~ a ventral side area (21), a dorsal side area (22), two lateral side areas (23,24), a bottom apposition surface (25), and a top surface (26); wherein and

C) ~~the two sections (10,20) are moveable in relation to each other by means of via~~ two joints (38;39) arranged between the two sections (10;20), wherein:

D) ~~each of the joints (38;39) is provided with has~~ a swivel axle (3;4) and the two swivel axles (3;4) are arranged transversely or perpendicular to each other;

E) ~~the two joints (38;39) are realised by means of comprise~~ an upper joint element (31) connected with the upper section (10), a central joint element (32), and a lower joint element (33) connected with the lower section (20);

F) one of the external upper and lower joint sections (31;33) comprises at least one concave sliding surface (58) rotation-symmetrical with regard to a one of the swivel axle (3;4); and

G) the central joint section (32) comprises at least one convex sliding surface (57) complementary to this concave sliding surface (58), wherein

H)—the other of the external upper and lower joint sections (31;33) comprises at least one convex sliding surface (55) rotation-symmetrical with regard to the other swivel axle (3;4); and

I)—the central joint section (32) comprises at least one concave sliding surface (56) complementary to this convex sliding surface (55);

K)—the sliding surfaces (55;56;57;58) are configured as partial surface areas of circular cylindrical or circular conical surface areas; and

L)—the swivel axes axles (3;4) are arranged skewed to each other.

2. (currently amended) The intervertebral implant (1) according to Claim claim 1, wherein the lower joint element (33) comprises at least one lower concave sliding surface (58) rotation-symmetrical with regard to the first swivel axle (3) and the central joint section (32) comprises at least one lower convex sliding surface (57) complementary to the lower concave sliding surface (58).

3. (currently amended) The intervertebral implant (1) according to Claim claim 1, wherein the upper joint element (31) comprises at least one upper convex sliding surface (55) rotation-symmetrical with regard to the second swivel axle (4) and the central joint section (32) comprises at least one upper concave sliding surface (56) complementary to the upper convex sliding surface (55).

4. – 6. (canceled)

7. (currently amended) The intervertebral implant (1) according to claim 1, wherein further comprising a means (40) is provided that keeps for keeping the two sections (10;20), measured at their ventral side areas (11;21), at a fixed distance from each other.

8. (currently amended) The intervertebral implant (1) according to claim 1, ~~wherein further comprising a means (40) is provided that is suitable for causing temporary blocking of the mobility of the two sections (10;20) around the joints (38;39).~~

9. (currently amended) The intervertebral implant (1) according to ~~Claim~~ claim 7, wherein the means (40) can be attached to the two ventral side areas (11;21) of the two sections (10;20).

10. (currently amended) The intervertebral implant (1) according to ~~Claim~~ claim 8, wherein the means (40) include an insert (41) with a lower end (45) and an upper end (46) and a depression (42;43) in the surfaces (16;26) at each of the two sections (10;20), which are open on the ventral side areas (11;21), and that the insert (41) with its ends (45;46) can be inserted into each of the depressions (42;43).

11. (currently amended) The intervertebral implant (1) according to ~~Claim~~ claim 10, wherein the depressions (42;43) are dovetail guides and the ends (45;46) on the insert (41) are arranged complementary to these dovetail guides.

12. (currently amended) The intervertebral implant (1) according to ~~Claim~~ claim 11, wherein the dovetail guides are tapered from the ventral side areas (11;21) towards the dorsal side areas (12;22).

13. (currently amended) The intervertebral implant (1) according to claim 1, wherein the upper and the lower ~~section~~ sections (10;20) each comprise at least two drill holes (80) running through from the ventral side areas (11;21) to the apposition surfaces (15;25) with longitudinal axes (83) for receiving bone fixation devices (81).

14. (currently amended) The intervertebral implant (1) according to Claim claim 13, wherein the longitudinal axes (83) of the drill holes (80) make an angle γ with the central axis (2).

15. (currently amended) The intervertebral implant (1) according to Claim claim 14, wherein the angle γ lies in a range of between 20° and 65° .

16. (currently amended) The intervertebral implant (1) according to claim 13, wherein the longitudinal axes (83) of the drill holes (80) as seen from the ventral side areas (11;21) diverge from the inner surfaces (16;26) against the apposition surfaces (15;25).

17. (currently amended) The intervertebral implant (1) according to claim 13, wherein the drill holes (80) are conically tapered towards the apposition surfaces (15;25).

18. (currently amended) The intervertebral implant (1) according to claim 13, wherein the drill holes (80) ~~are provided with~~ have an internal thread (82).

19. (currently amended) A process for the replacement of a ~~defect~~ defective, natural intervertebral disk ~~characterized~~ by an intervertebral implant, comprising the steps:
A) blocking of the one or more joint(s) (38;39) of an intervertebral implant (1) through the special with blocking means (40) inserted in a certain position of the joint(s) (38;39);
B) insertion of inserting the intervertebral implant (1) into the an intervertebral space to be treated; and
C) release releasing and removal of removing the device (40) blocking means inserted into the intervertebral implant (1) for blocking the joint(s) (38;39).

20. (currently amended) The process according to ~~Claim~~ claim 19,
additionally comprising ~~the step of the~~ subsequent blocking of the joint(s) (38;39) on the
implanted intervertebral implant (1) ~~through~~ with the blocking means (40).